



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,226	10/11/2001	Mikael O. Weigelt	PROS1110-1	7789

44654 7590 11/22/2005

SPRINKLE IP LAW GROUP
1301 W. 25TH STREET
SUITE 408
AUSTIN, TX 78705

EXAMINER

KRSCIUNAS, LINDA

ART UNIT PAPER NUMBER

3623

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/975,226

Applicant(s)

WEIGELT ET AL.

Examiner

Linda Krisciunas

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 21 and 27 are rejected under U.S.C. 112, second paragraph, as being indefinite for lack of antecedent basis with respect to claim language.

Claim 21 recites the limitation "the resource demand". There is insufficient antecedent basis for this limitation in the claim.

Claim 27 recites the limitation "the results of network optimization". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1, 13 and 22 are directed toward a revenue management model which contains four "data structures". These four structures are a means for storing various data and not a true data structure. A true data structure is a logical relationship among data elements designed to support specific data manipulation functions. Additionally,

Art Unit: 3623

there are no steps specified which produce a real world result which renders the claimed invention non-statutory for failure to recite a final result that is concrete and tangible. Specifically, claim 1 merely recites four different types of data which is non-functional descriptive material and is directed towards non-statutory subject matter. Claims 1, 13 and 22 additionally lack practical application that fails to produce useful, concrete and tangible results. Thus, these claims are directed toward non-statutory subject matter.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Talluri (US 6,263,315).

As per claim 1, 12, 13 and 22, Talluri teaches a first data structure containing a representation of a network demand (column 4, line 46), a second containing a network resource (column 4, line 17), a third containing a resource bundle (column 4, line 20: multiple resource), and a fourth containing a resource bundle to demand link (column 4, lines 41-43, where resource bundle is equivalent to inventory).

As per claim 2, Talluri teaches the resource bundle to demand link associates the resource bundle to network demand (column 5, lines 46-56).

As per claim 3, 14 and 24, Talluri teaches a representation of the maximum capacity (column 4, line 67), physical capacity (See Figure 4: maximum number of seats) and expected use capacity of the network resources (column 5, lines 57-58).

As per claim 4, 15 and 25, Talluri teaches a representation of optimal quantity (column 6, line 34, where units is equivalent to quantity) and optimal price (column 6, line 3).

As per claim 5, Talluri teaches the data model is applied to the airline industry (column 5, line 46).

As per claim 6, 16 and 23, Talluri teaches an itinerary demand (column 5, line 61) and a fare class demand (column 7, line 57).

As per claim 7 and 17, Talluri teaches the network resource includes a seat on a flight leg (column 5, line 65).

As per claim 8 and 18, Talluri teaches the resource bundle includes an origin to destination itinerary (claim 5: "trip to selected destination").

As per claim 9 and 19, Talluri teaches the resource bundle to demand link associates the origin to destination itinerary with the network demand (column 5, lines 46-56, where the reservation system (16) is making origin to destination itineraries).

As per claim 10, 20 and 26, Talluri teaches the fifth data structure represents a resource demand (column 4, lines 13-14: "request for a resource" is equivalent to demand).

As per claim 11, Talluri teaches the resource demand represents a total demand on the resource (column 6, lines 1-8, where the sum of the threshold values represents the sum of the resources, per column 5, lines 51-53).

As per claim 21 and 27, Talluri teaches generating the resource demand with a network optimization (column 4, lines 46-49, where the threshold values represent resources, per column 5, lines 51-53).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following literature also teach the subject matter of revenue management: Revenue Management: Research Overview and Prospects by Jeffrey McGill et al, Institute for Operations Research and the Management Sciences, May 1999, vol 33, no 2, pg 233-256; Forecasting for airline revenue management, Hossam Zaki, The Journal of Business Forecasting Methods & Systems, Spring 2000, vol 19, issue 1, pg 2; Talus Solutions, Inc Announces Application Service Provider Strategy to Expand Its Pricing and Revenue Management Solutions, Business Editors, Business Wire (New York), March 13, 2000, pg 1; Talus Solutions, Inc Launches Talus Solutions Revenue Management Suite to Serve E-Business Marketplace, Business Editors, Business Wire (New York), Feb 8, 2000, pg 1; Campbell et al (US 5,918,209), Talluri (US 2002/0065699), Phillips et al (US 2002/0120492), Walker et al (US 2002/0161610), and Gardner et al (US 2002/0178034).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linda Krisciunas whose telephone number is 571-272-

Art Unit: 3623

6931. The examiner can normally be reached on Monday through Friday, 6:30 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LMK

LMK
Nov 17, 2005

[Signature]
TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3500